

1/20

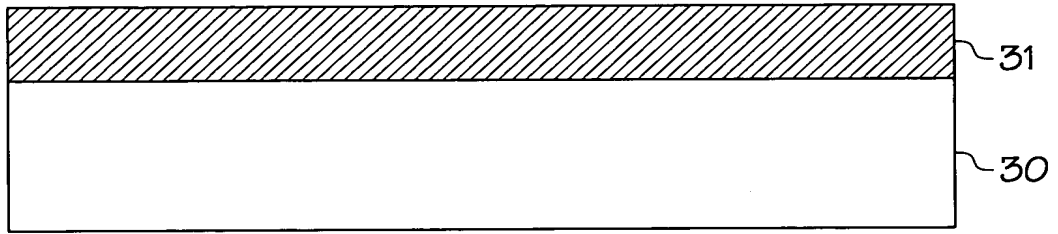


FIG. 1A

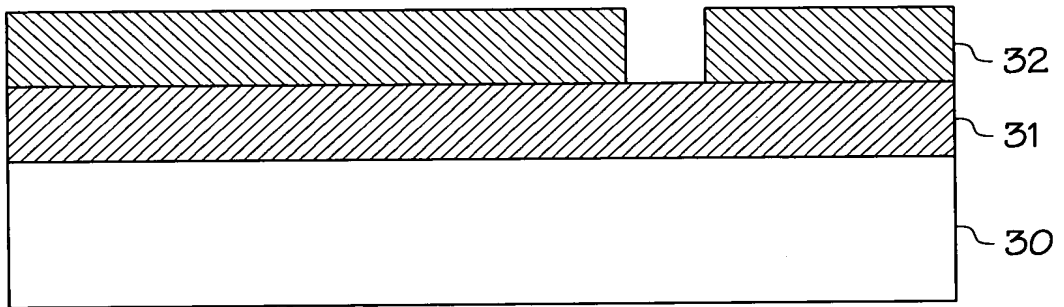


FIG. 1B

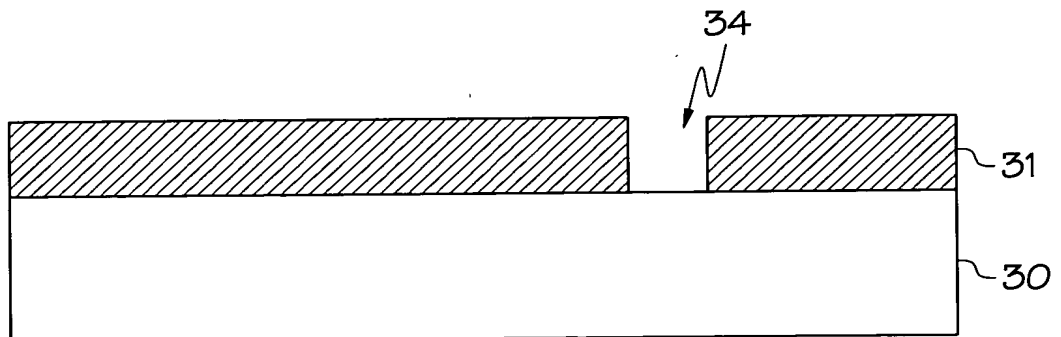


FIG. 1C

00910537 441604

APPROVED	O.G. FIG.
BY	CLASS SU207.55
DRAFTSMAN	

3/20

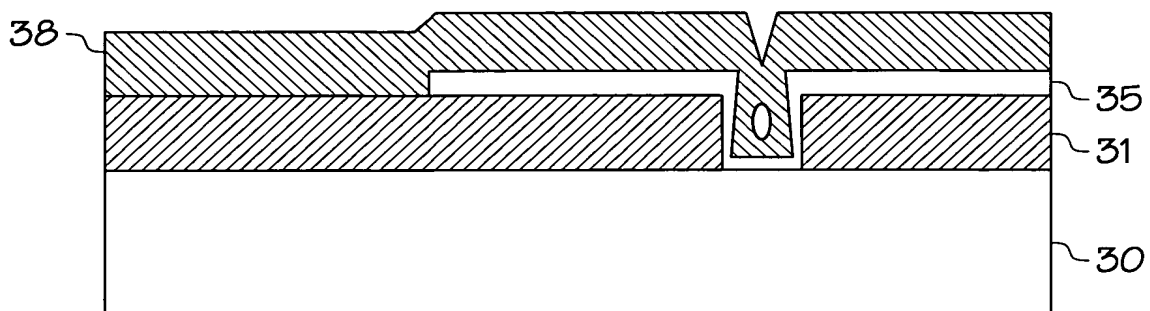


FIG. 1G

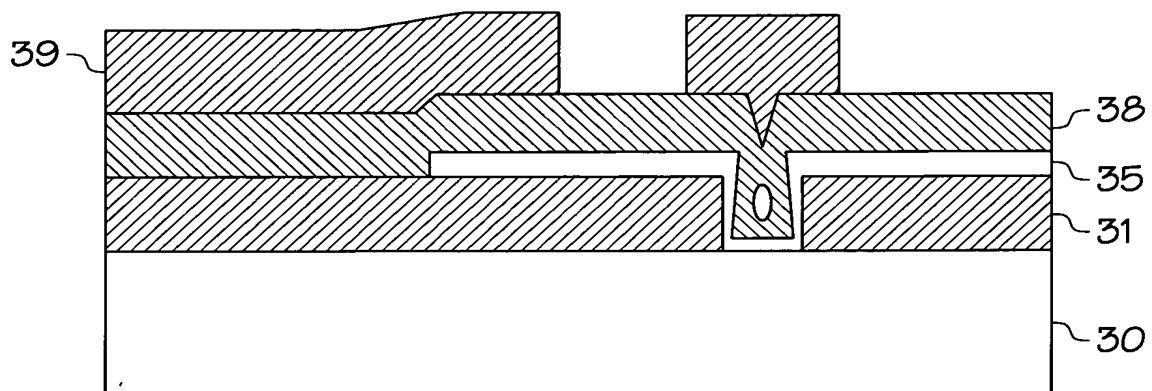


FIG. 1H

APPROVED	O.G. FIG.
BY	CLASS. SUBMITTALS
DRAFTSMAN	

4/20

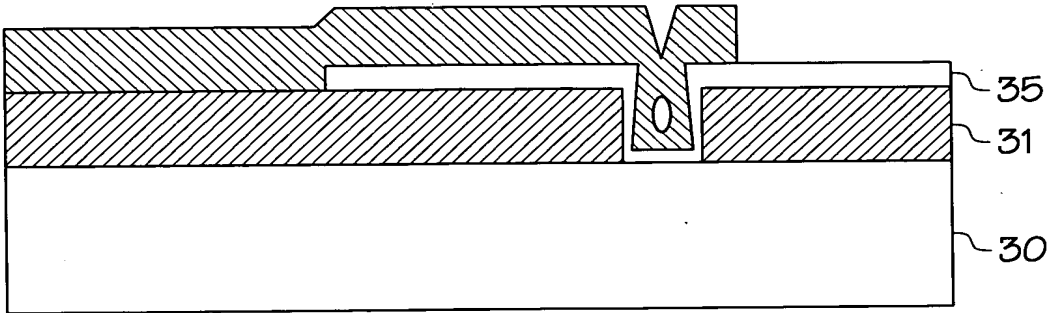


FIG. 1I

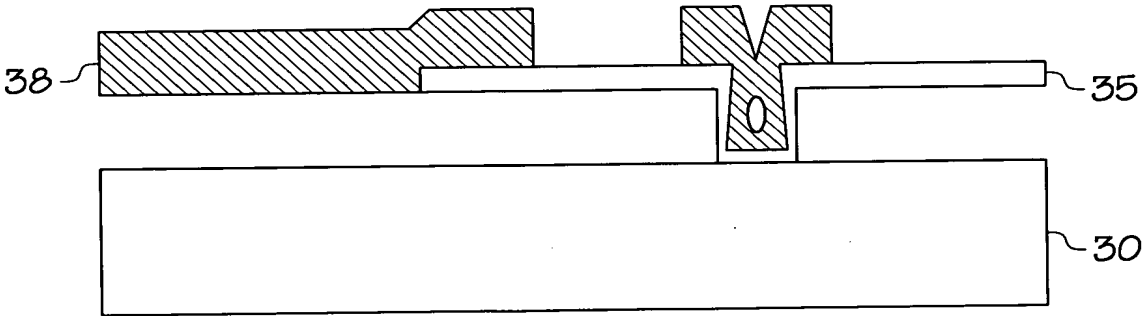


FIG. 1J

09040537 114604

5/20

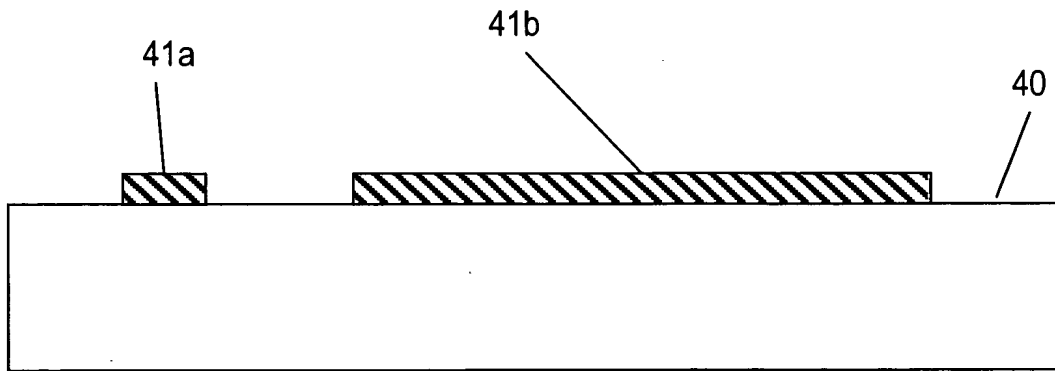


FIG. 2A

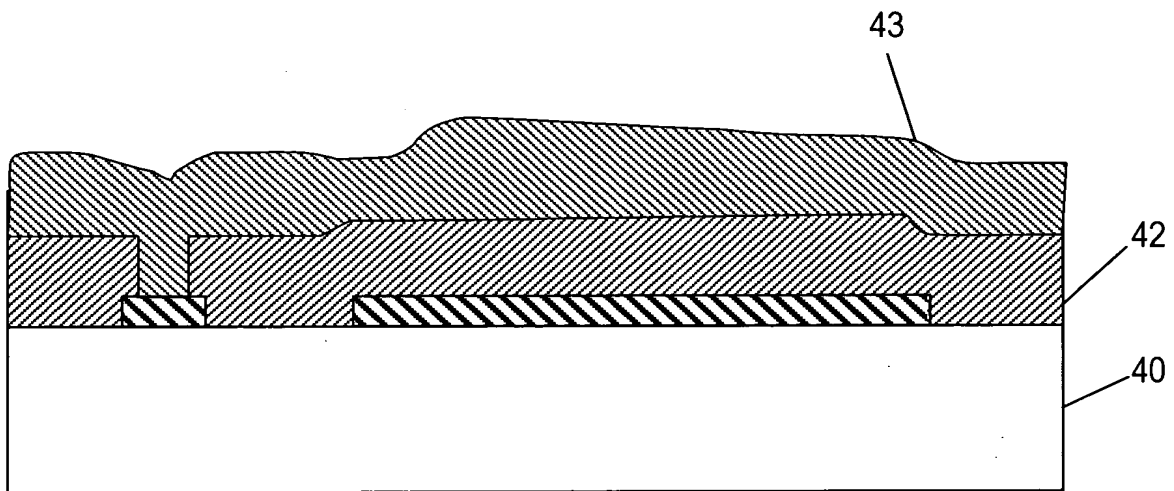


FIG. 2B

00010537 11504

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

6/20

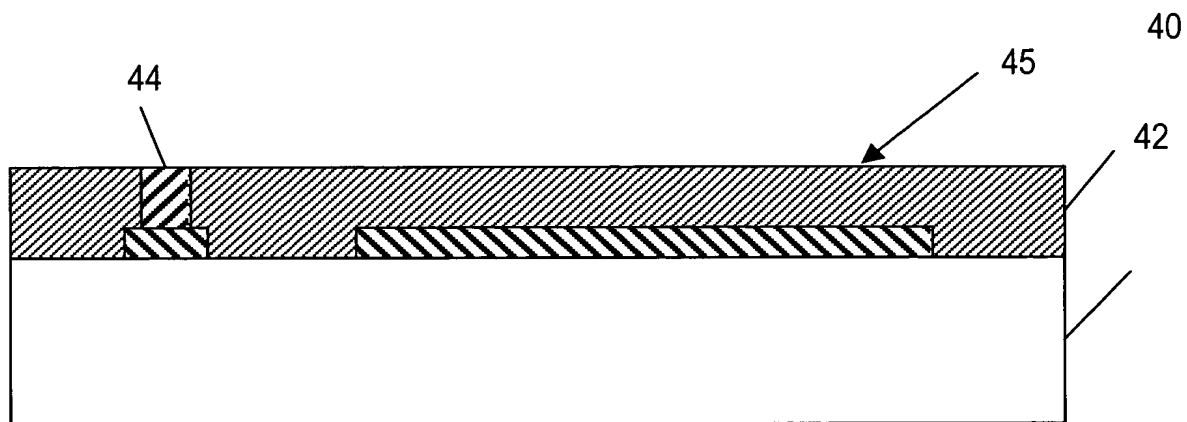


FIG. 2C

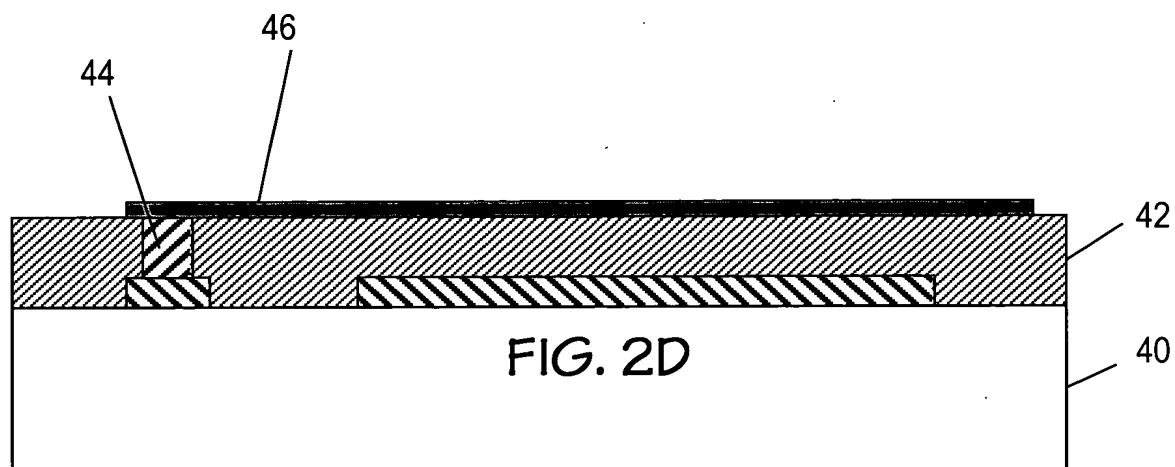


FIG. 2D

09910537 11604

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

7/20

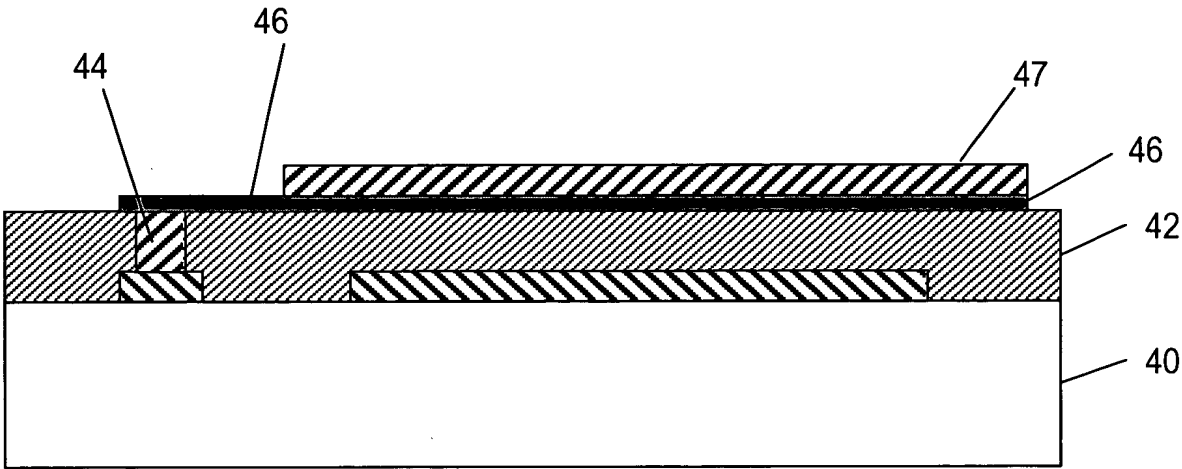


FIG. 2E

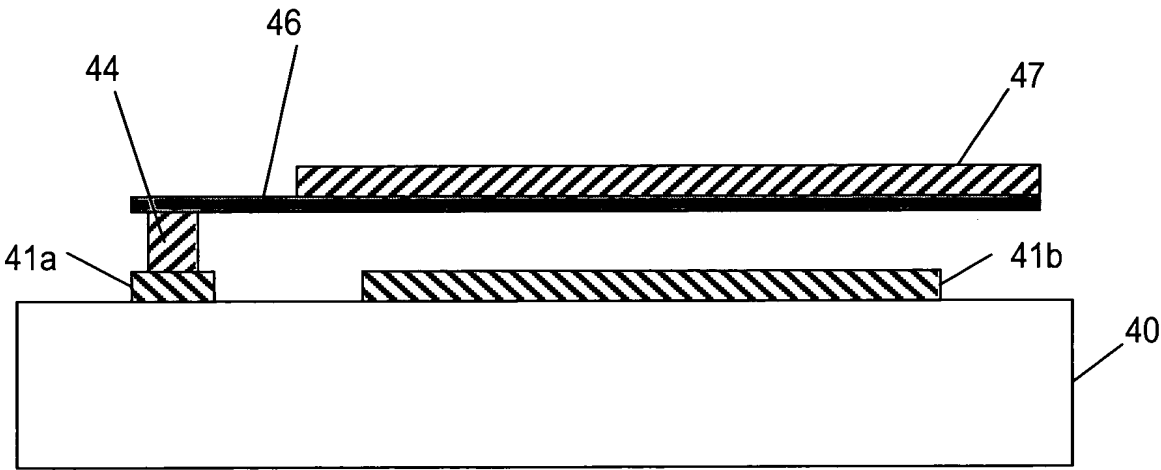


FIG. 2F

0940537-44504

APPROVED	DATE
BY	CLASS
DRAFTSMAN	SUPPLIER

POST 4507559

9/20

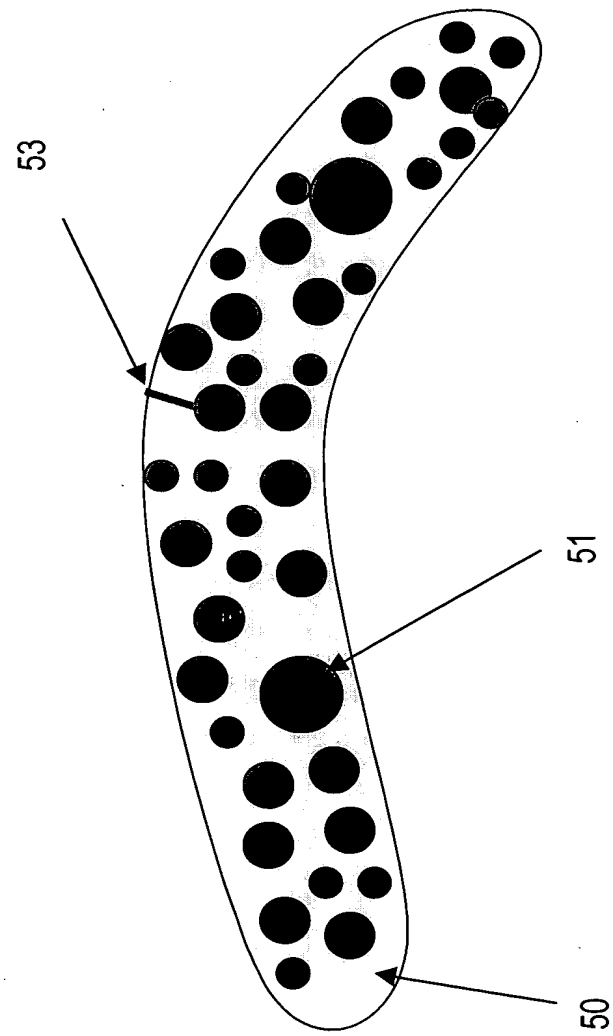
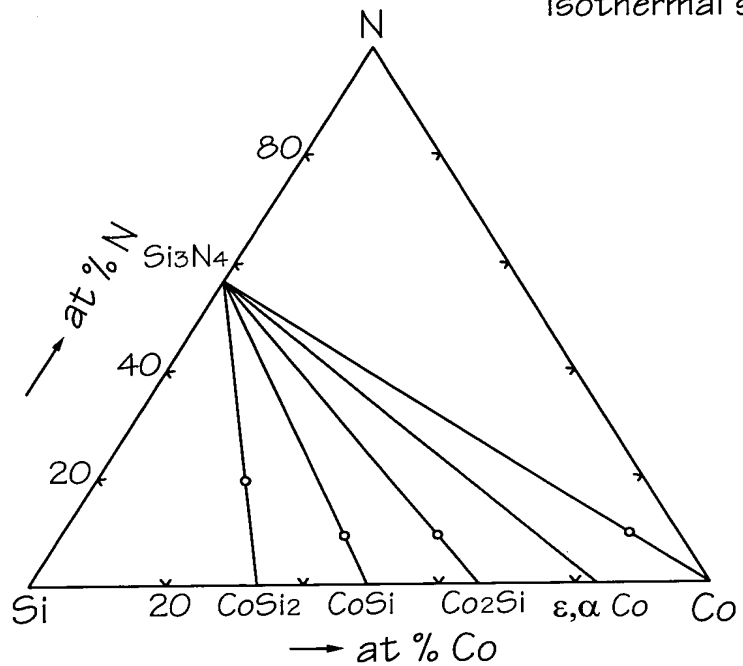


FIG. 3

10/20

Co-Si-N Isothermal Section
at 1000°C

isothermal section 1273 K

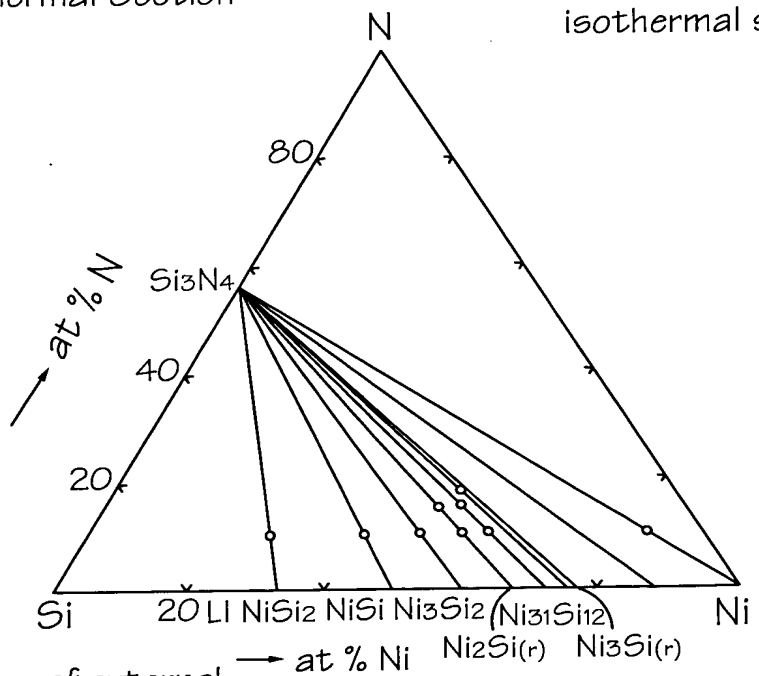


In the absence of external
nitrogen pressure.

FIG. 4A

Ni-Si-N Isothermal Section
at 900°C

isothermal section 1173 K



In the absence of external
nitrogen pressure.

FIG. 4B

COPY 44664

Ru-Si-N Isothermal Section
at 1000°C

→ at % Ru
FIG. 4C

Ag-Si-N Isothermal Section
at 900°C

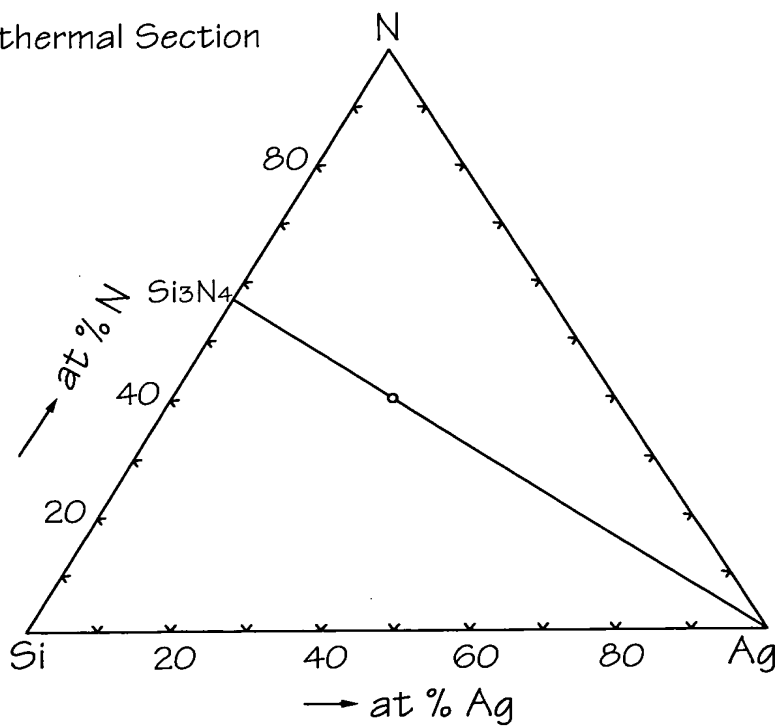


FIG. 4D

12/20

Au-Si-N Isothermal Section
at 900°C

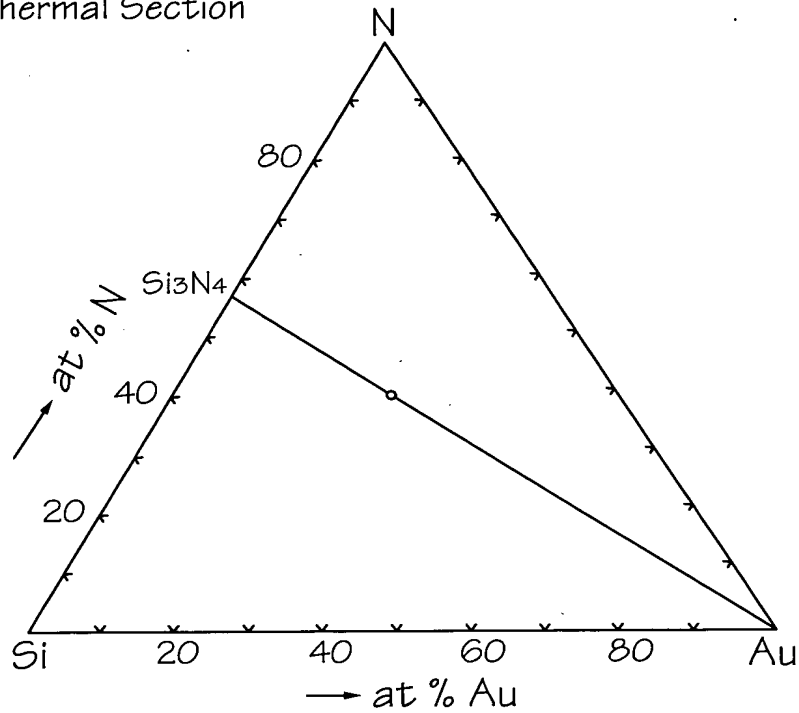


FIG. 4E

Cu-Si-N Isothermal Section
at 700°C

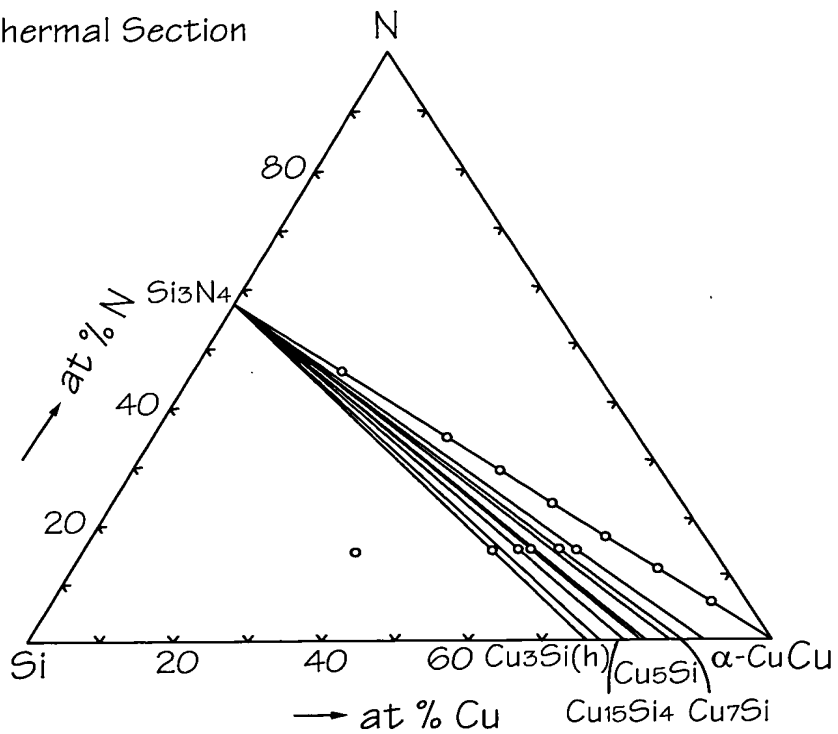


FIG. 4F

00010537 11504

13/20

Ag-B-N Isothermal Section
at 800°C

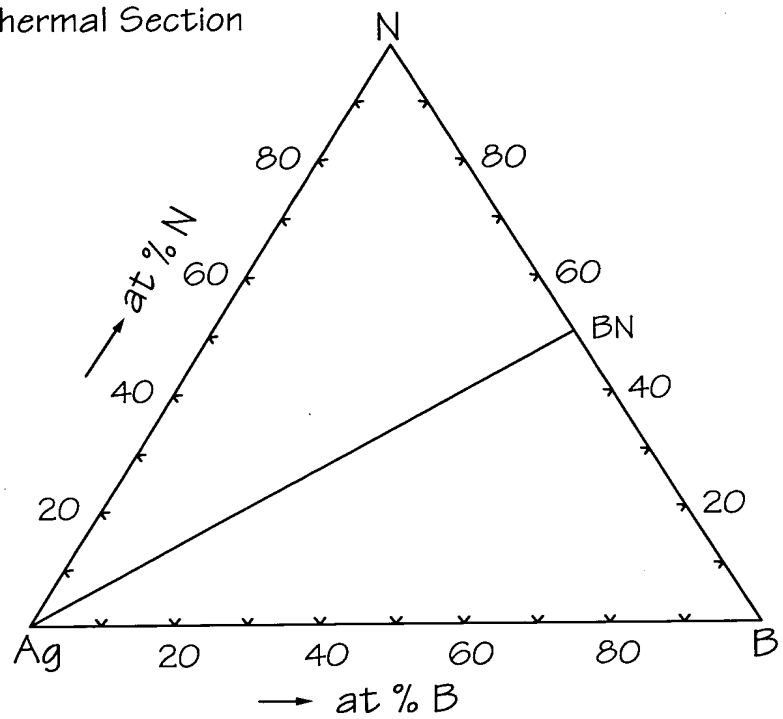


FIG. 4G

Au-B-N Isothermal Section
at 800°C

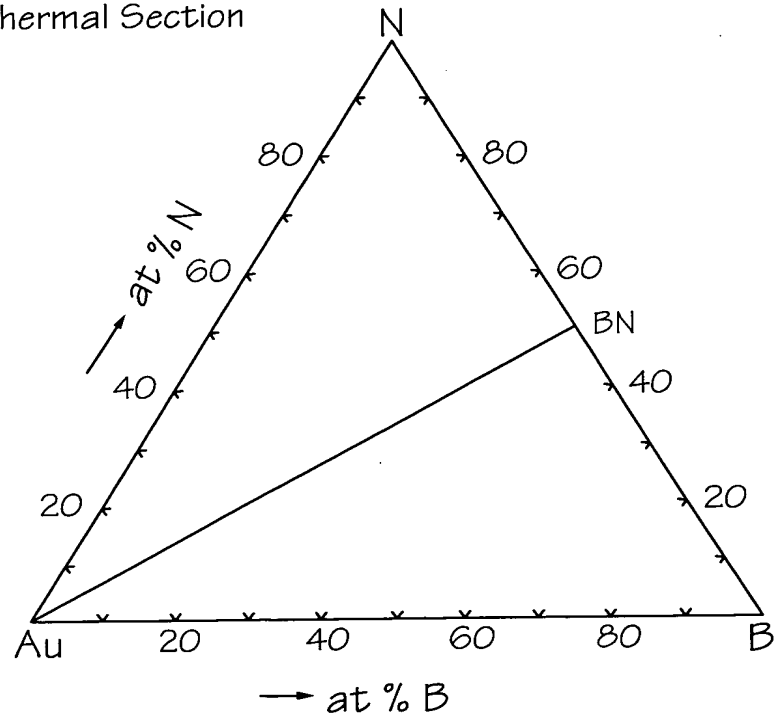


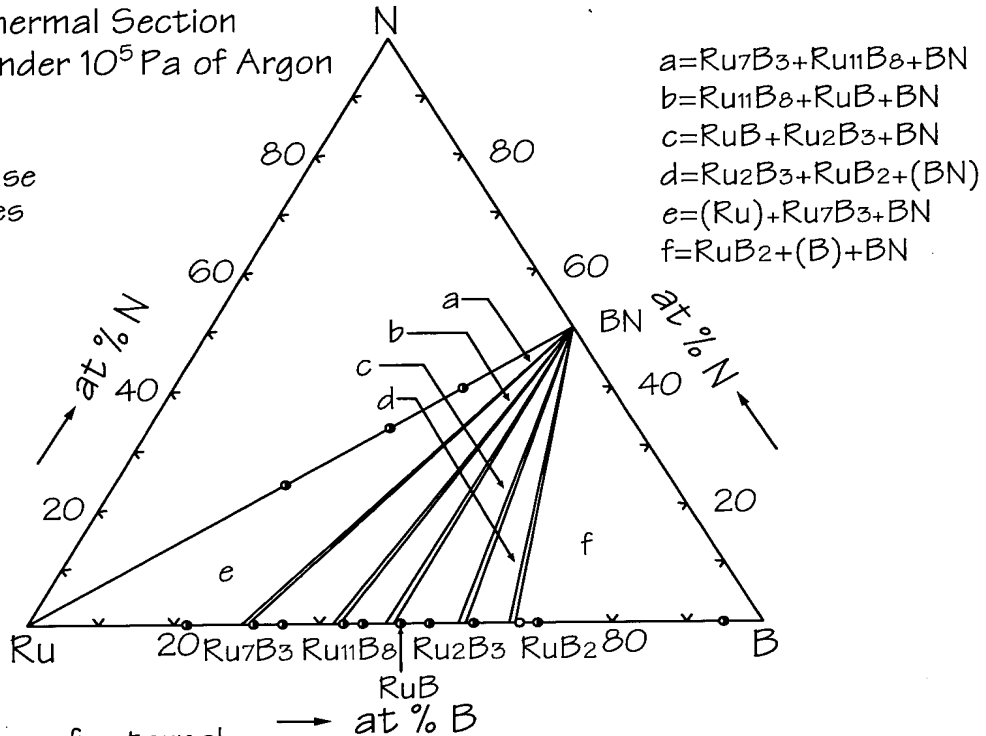
FIG. 4H

09910537 44604

14/20

Ru-B-N Isothermal Section
at 1200°C Under 10⁵ Pa of Argon

- single phase
- two phases

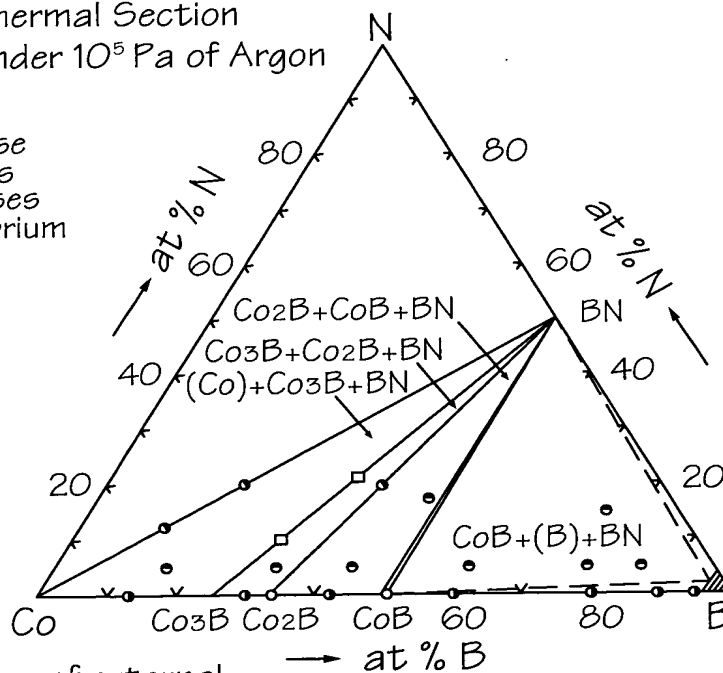


In the absence of external
nitrogen.

FIG. 4I

Co-B-N Isothermal Section
at 900°C Under 10⁵ Pa of Argon

- single phase
- two phases
- three phases
- non-equilibrium (no Co₃B)



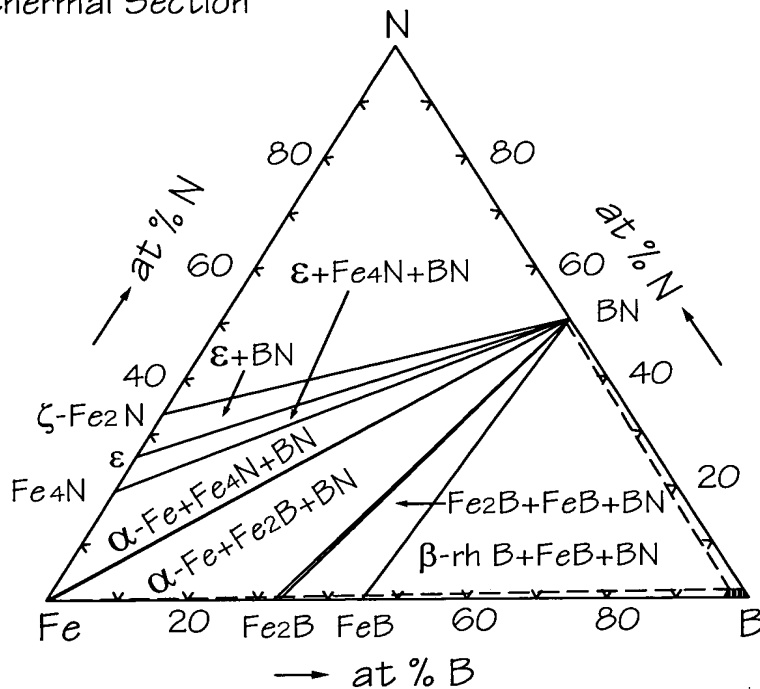
In the absence of external
nitrogen.

FIG. 4J

00040537 44594

15/20

Fe-B-N Isothermal Section
at 400°C

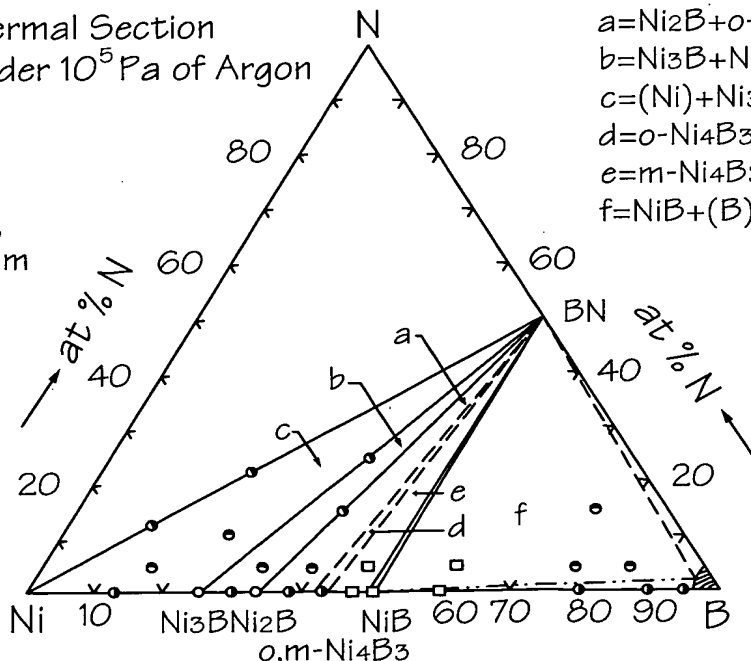


In the absence of external
nitrogen.

FIG. 4K

Ni-B-N Isothermal Section
at 900°C Under 10^5 Pa of Argon

- single phase
- two phases
- ◐ three phases
- ◑ non-equilibrium



- a = $\text{Ni}_2\text{B} + \text{o-Ni}_4\text{B}_3 + \text{BN}$
- b = $\text{Ni}_3\text{B} + \text{Ni}_2\text{B} + \text{BN}$
- c = $(\text{Ni}) + \text{Ni}_3\text{B} + \text{BN}$
- d = $\text{o-Ni}_4\text{B}_3 + \text{m-Ni}_4\text{B}_3 + \text{BN}$
- e = $\text{m-Ni}_4\text{B}_3 + \text{NiB} + \text{BN}$
- f = $\text{NiB} + (\text{B}) + \text{BN}$

In the absence of external
nitrogen.

FIG. 4L

0910537 44504

FIG. 5

16/20

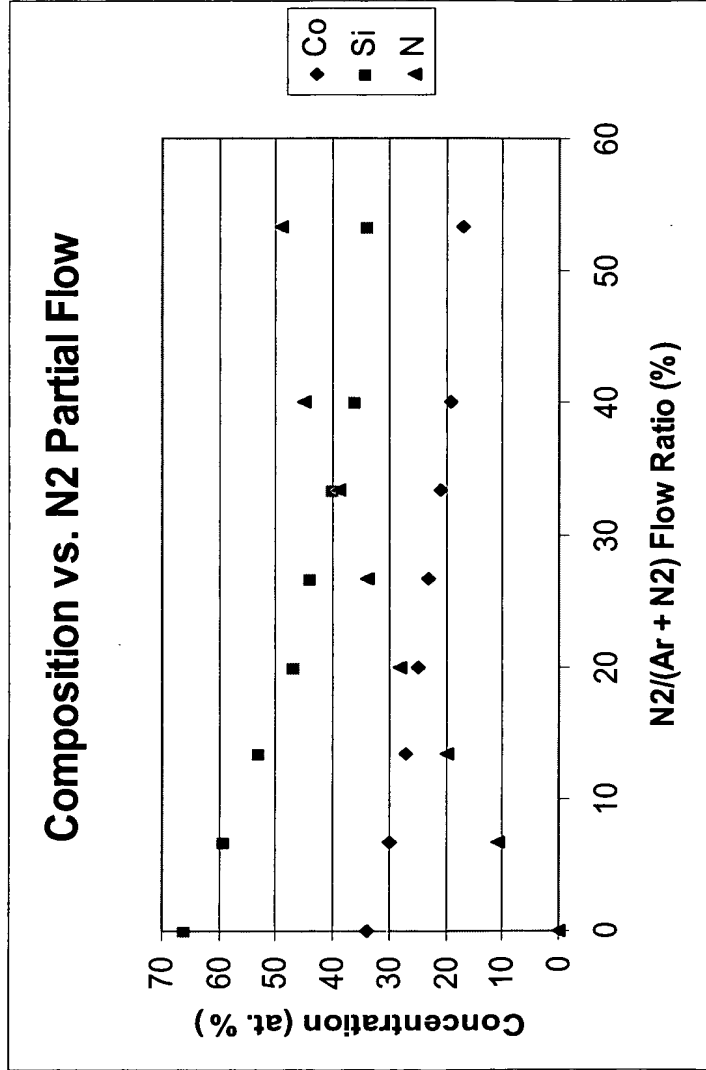


FIG. 5

17/20

17/20

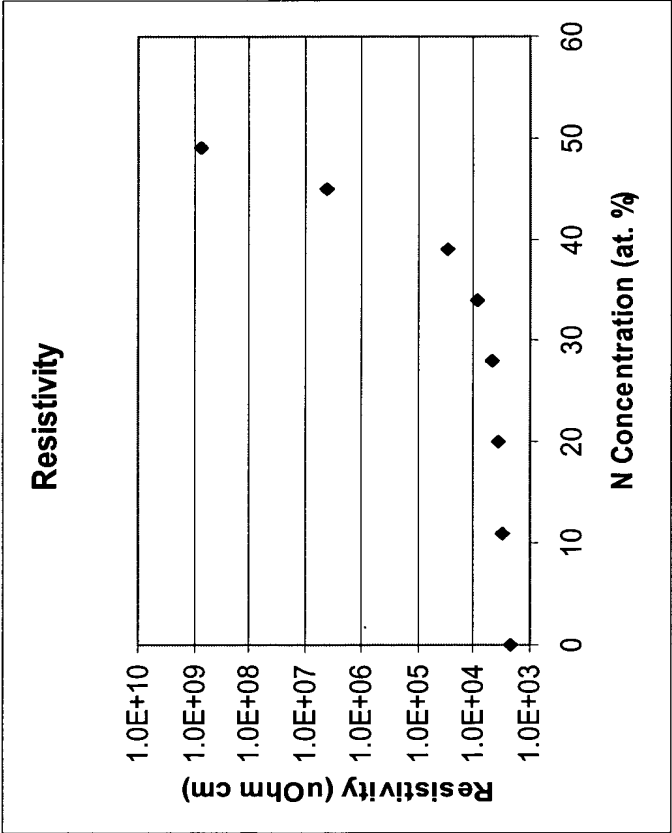


FIG. 6

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

709977 4507660

18/20

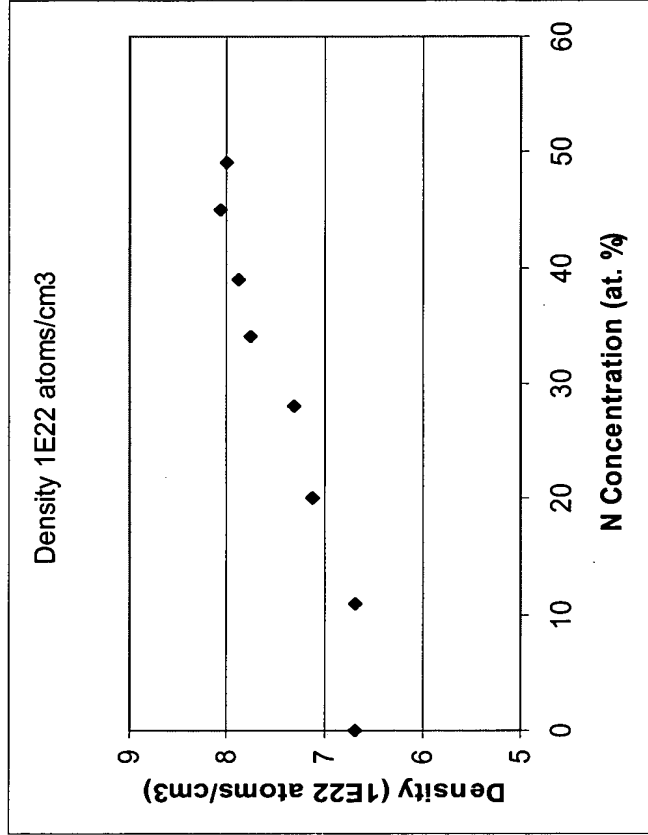


FIG. 7

APPROVED	O.G. FIG.
BY	CLASS
DRAFTSMAN	SUBCL

19/20

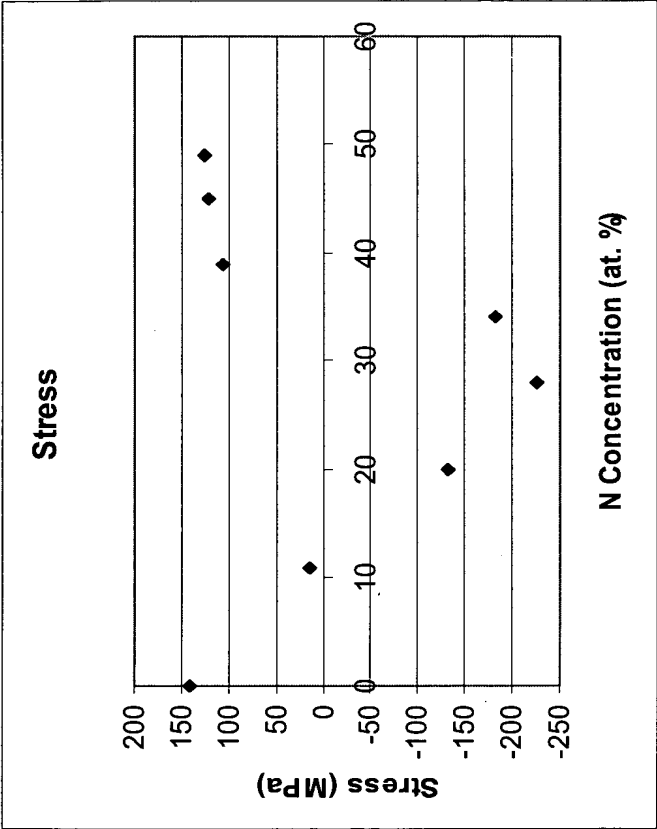


FIG. 8

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

POST 2531550

20/20

	10 sccm	20 sccm	30 sccm
Cl ₂ base	200	230	270
CF ₄ base	133	202	202

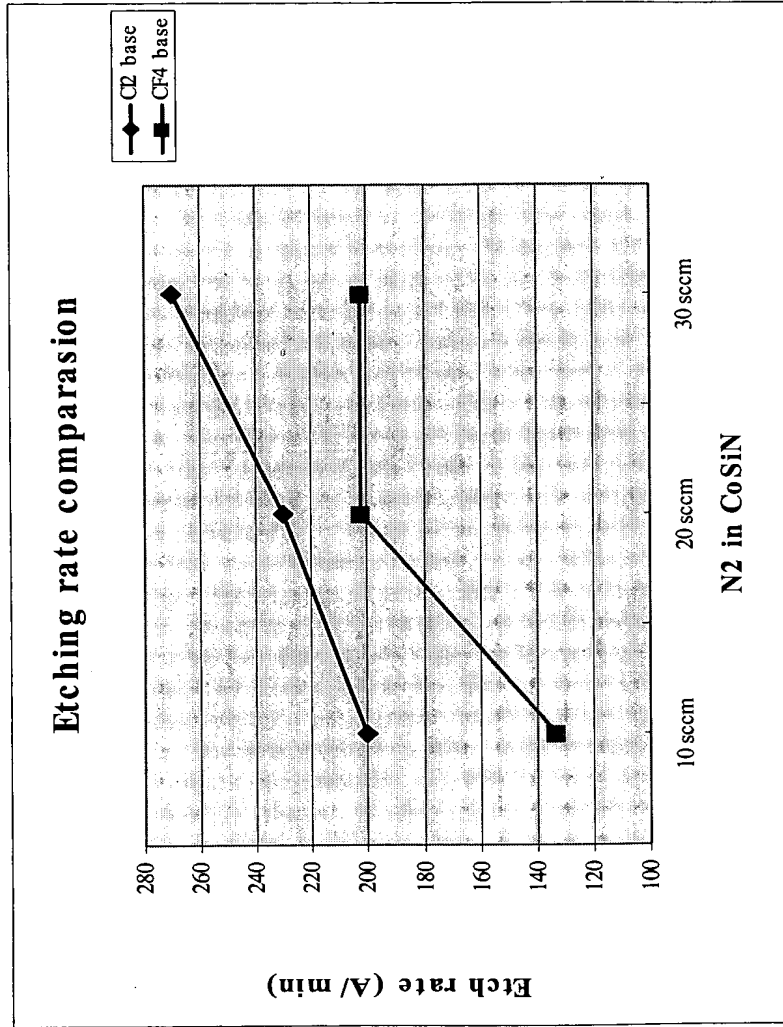


FIG. 9